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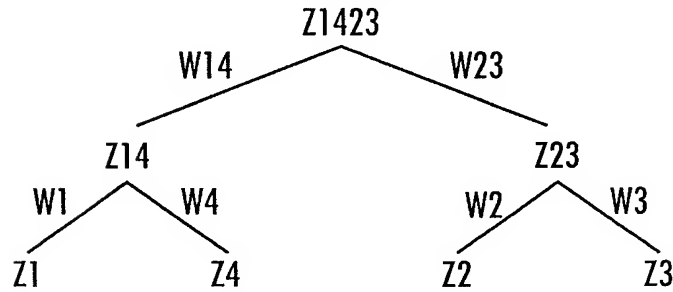Replacement Sheet

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FIG.42

$$Z14\_with\_bias = W1 \cdot Z1\_with\_bias + W4 \cdot Z4\_with\_bias$$
$$Z23\_with\_bias = W2 \cdot Z2\_with\_bias + W3 \cdot Z3\_with\_bias$$
$$Z1423\_with\_bias = W14 \cdot Z14\_with\_bias + W23 \cdot Z23\_with\_bias$$

$$Z1\_rel = Z1\_with\_bias - Z14\_with\_bias$$
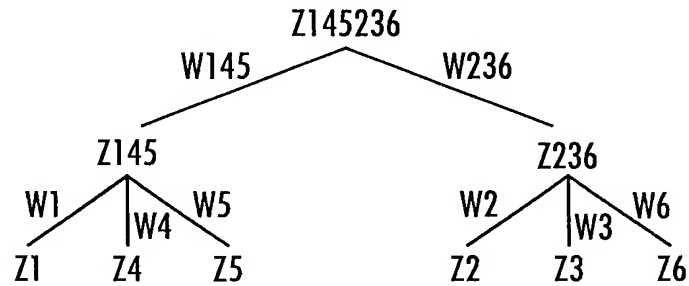$$Z4\_rel = Z4\_with\_bias - Z14\_with\_bias$$
$$Z2\_rel = Z2\_with\_bias - Z23\_with\_bias$$
$$Z3\_rel = Z3\_with\_bias - Z23\_with\_bias$$
$$Z14\_rel = Z14\_with\_bias - Z1423\_with\_bias$$
$$Z23\_rel = Z23\_with\_bias - Z1423\_with\_bias$$

FIG.43

$$Z145\_with\_bias = W1 \cdot Z1\_with\_bias + W4 \cdot Z4\_with\_bias + W5 \cdot Z5\_with\_bias$$
$$Z236\_with\_bias = W2 \cdot Z2\_with\_bias + W3 \cdot Z3\_with\_bias + W6 \cdot Z6\_with\_bias$$
$$Z145236\_with\_bias = W145 \cdot Z145\_with\_bias + W236 \cdot Z236\_with\_bias$$

$$Z1\_rel = Z1\_with\_bias - Z145\_with\_bias$$
$$Z4\_rel = Z4\_with\_bias - Z145\_with\_bias$$
$$Z5\_rel = Z5\_with\_bias - Z145\_with\_bias$$
$$Z2\_rel = Z2\_with\_bias - Z236\_with\_bias$$
$$Z3\_rel = Z3\_with\_bias - Z236\_with\_bias$$
$$Z6\_rel = Z6\_with\_bias - Z236\_with\_bias$$
$$Z145\_rel = Z145\_with\_bias - Z145236\_with\_bias$$
$$Z236\_rel = Z236\_with\_bias - Z145236\_with\_bias$$

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FIG.49

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FIG.54

ENTRY   (S6616)

$Zi\_rel\_estm = 0$

$Zj\_rel\_estm = Zj\_rel\_estm\_p + (0 - Zj\_rel\_estm\_p)$
$* \Delta T/(Testm + \Delta T)$

$Zk\_rel\_estm = Zk\_rel\_estm\_p + (0 - Zk\_rel\_estm\_p)$
$* \Delta T/(Testm + \Delta T)$

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FIG.62

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FIG.42

$$Z14\_with\_bias = W1 \cdot Z1\_with\_bias + W4 \cdot Z4\_with\_bias$$
$$Z23\_with\_bias = W2 \cdot Z2\_with\_bias + W3 \cdot Z3\_with\_bias$$
$$Z1423\_with\_bias = W14 \cdot Z14\_with\_bias + W23 \cdot Z23\_with\_bias$$

$$Z1\_rel = Z1\_with\_bias - Z14\_with\_bias$$
$$Z4\_rel = Z4\_with\_bias - Z14\_with\_bias$$
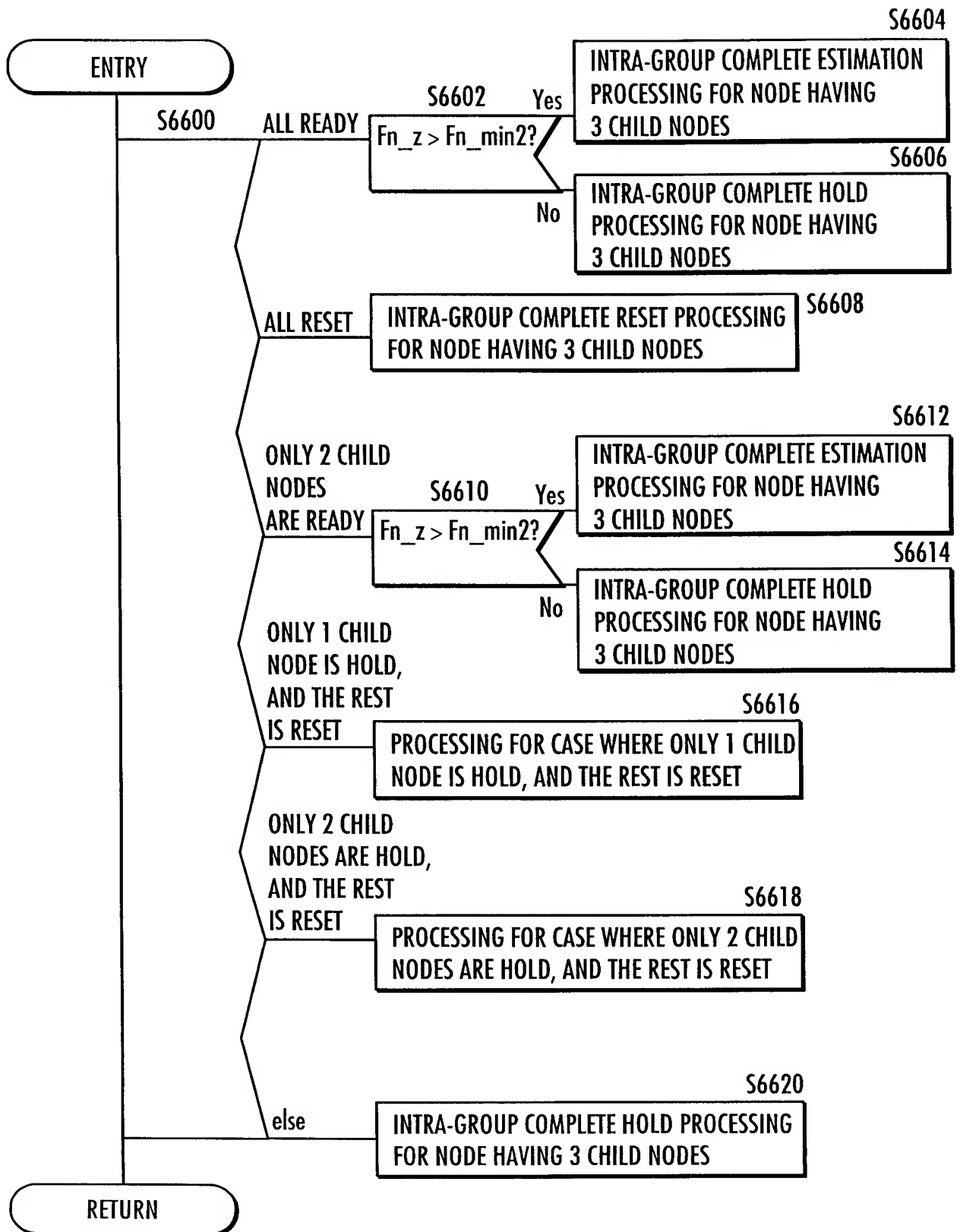$$Z2\_rel = Z2\_with\_bias - Z23\_with\_bias$$
$$Z3\_rel = Z3\_with\_bias - Z23\_with\_bias$$
$$Z14\_rel = Z14\_with\_bias - Z1423\_with\_bias$$
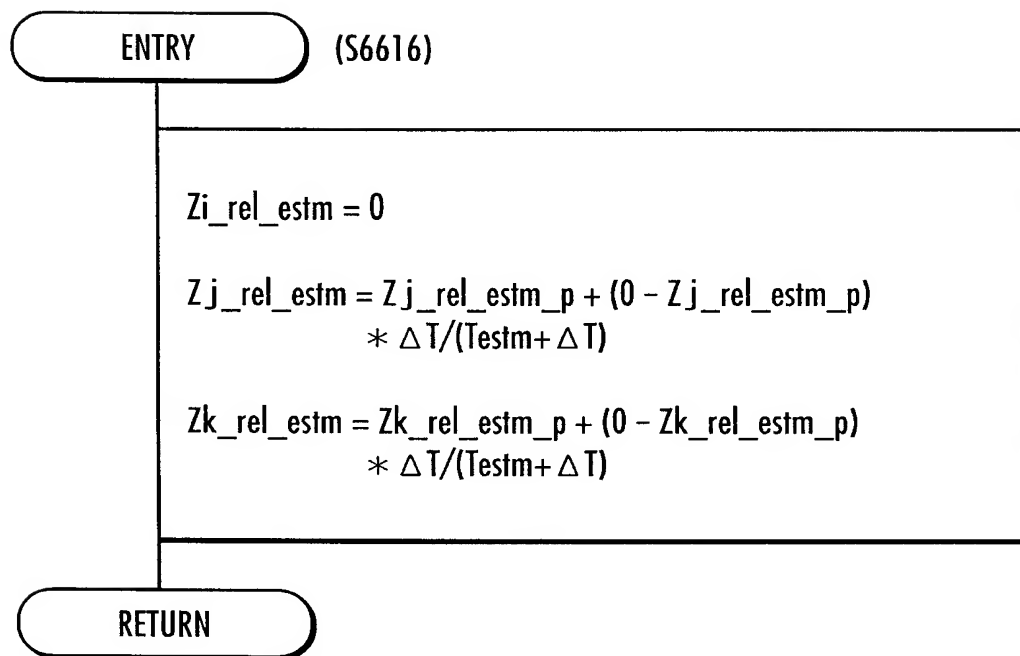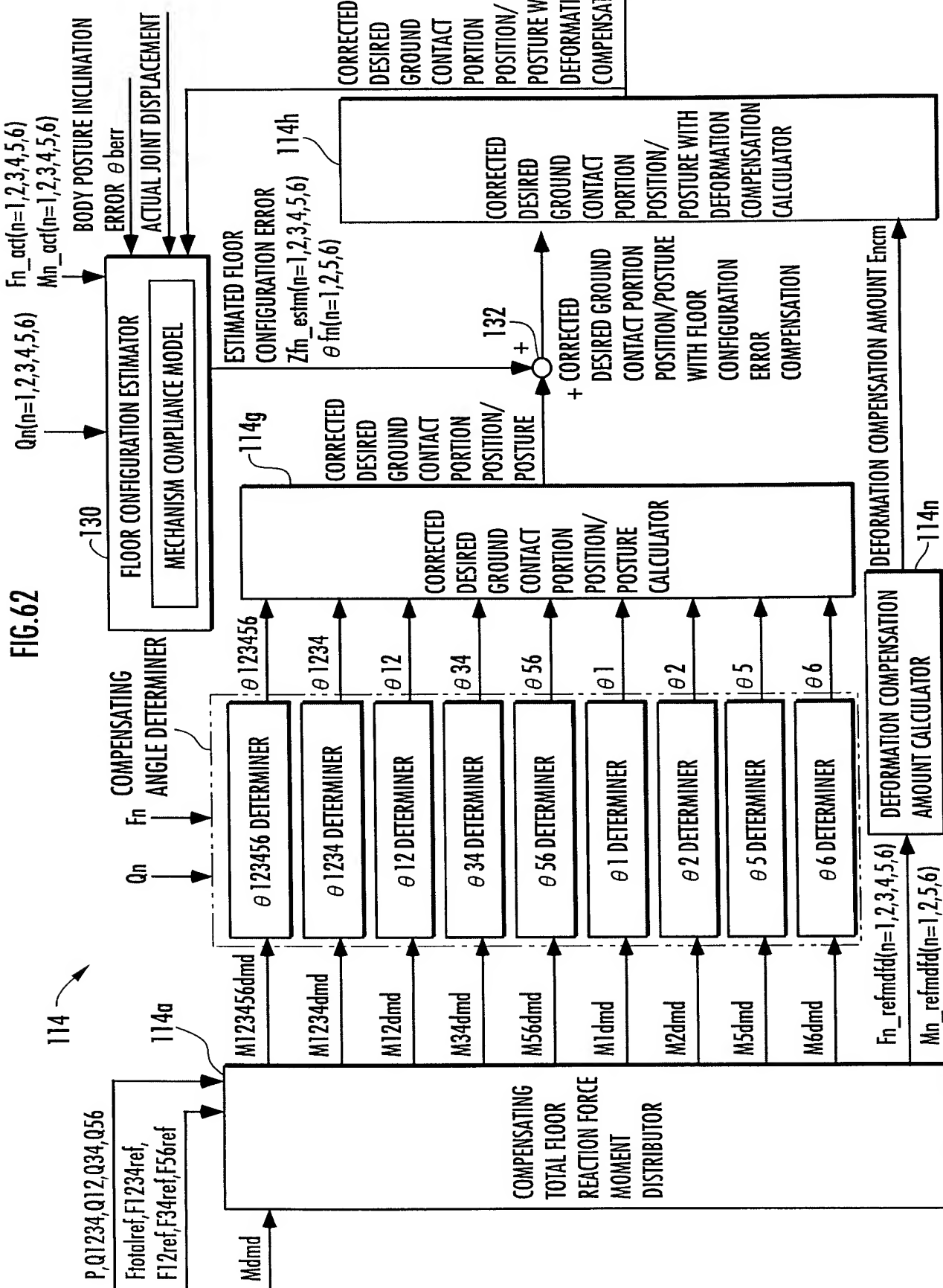$$Z23\_rel = Z23\_with\_bias - Z1423\_with\_bias$$

FIG.43

$$Z145\_with\_bias = W1 \cdot Z1\_with\_bias + W4 \cdot Z4\_with\_bias + W5 \cdot Z5\_with\_bias$$
$$Z236\_with\_bias = W2 \cdot Z2\_with\_bias + W3 \cdot Z3\_with\_bias + W6 \cdot Z6\_with\_bias$$
$$Z145236\_with\_bias = W145 \cdot Z145\_with\_bias + W236 \cdot Z236\_with\_bias$$

$$Z1\_rel = Z1\_with\_bias - Z145\_with\_bias$$
$$Z4\_rel = Z4\_with\_bias - Z145\_with\_bias$$
$$Z5\_rel = Z5\_with\_bias - Z145\_with\_bias$$
$$Z2\_rel = Z2\_with\_bias - Z236\_with\_bias$$
$$Z3\_rel = Z3\_with\_bias - Z236\_with\_bias$$
$$Z6\_rel = Z6\_with\_bias - Z236\_with\_bias$$
$$Z145\_rel = Z145\_with\_bias - Z145236\_with\_bias$$
$$Z236\_rel = Z236\_with\_bias - Z145236\_with\_bias$$

FIG.49

```
                                                                    S6604
                                          ┌─────────────────────────────┐
                                          │ INTRA-GROUP COMPLETE ESTIMATION │
                              S6602   Yes │ PROCESSING FOR NODE HAVING      │
 ┌───────┐        ALL READY  ┌──────────┐ │ 3 CHILD NODES                   │
 │ ENTRY │                   │Fn_z > Fn_min2?│                             │
 └───────┘  S6600            └──────────┘ └─────────────────────────────┘
```
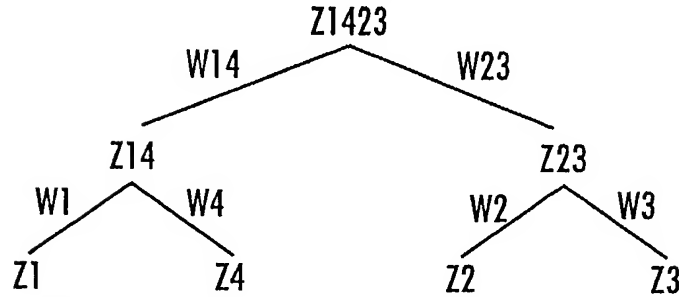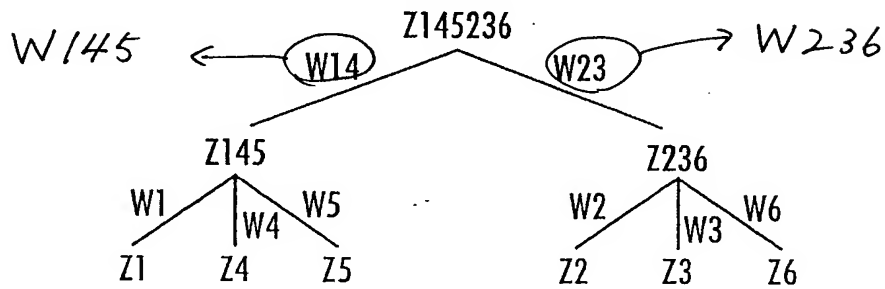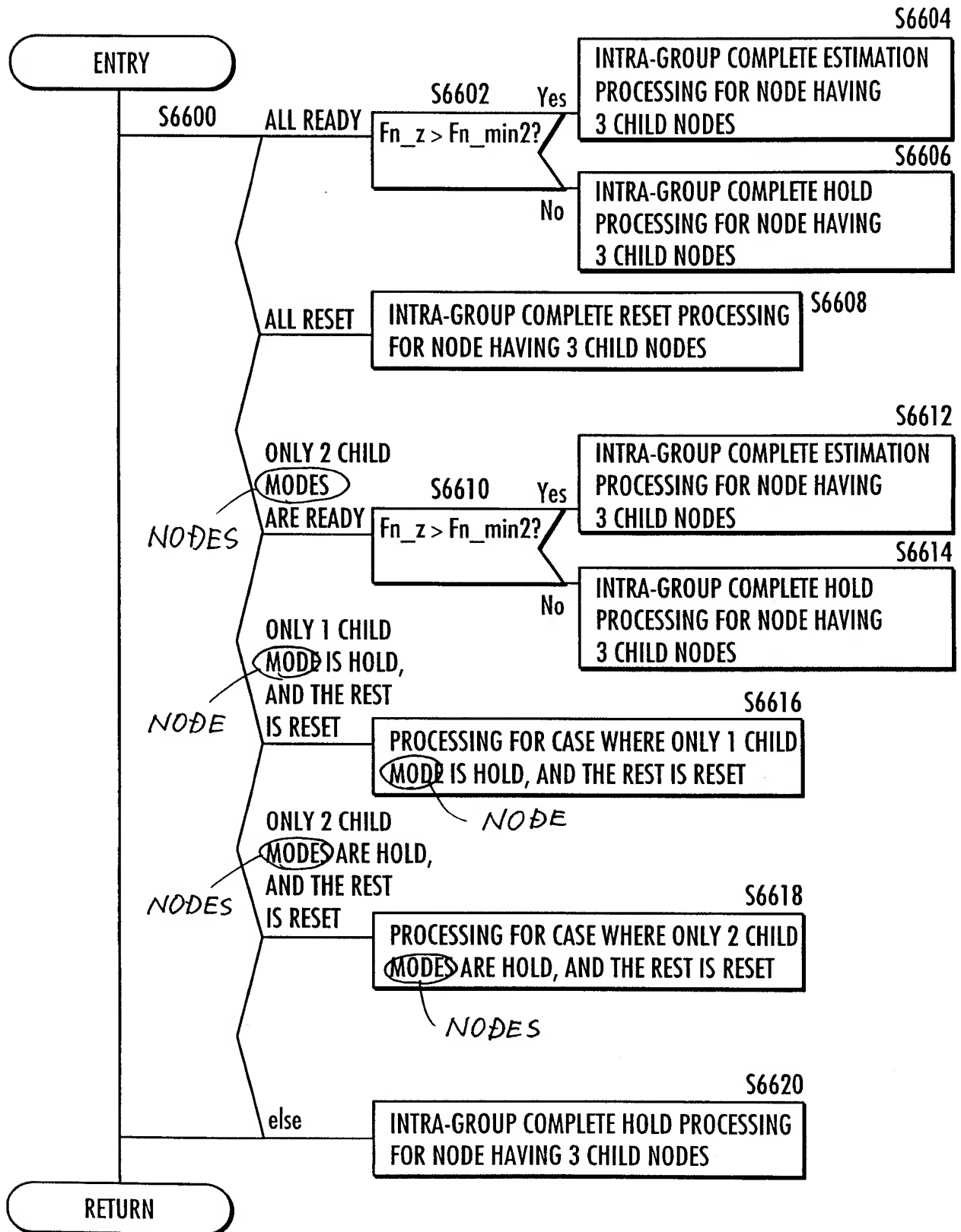
ENTRY

S6600   ALL READY   S6602   Fn_z > Fn_min2?

Yes → **S6604** INTRA-GROUP COMPLETE ESTIMATION PROCESSING FOR NODE HAVING 3 CHILD NODES

No → **S6606** INTRA-GROUP COMPLETE HOLD PROCESSING FOR NODE HAVING 3 CHILD NODES

ALL RESET → **S6608** INTRA-GROUP COMPLETE RESET PROCESSING FOR NODE HAVING 3 CHILD NODES

NODES

ONLY 2 CHILD (MODES) ARE READY   S6610   Fn_z > Fn_min2?

Yes → **S6612** INTRA-GROUP COMPLETE ESTIMATION PROCESSING FOR NODE HAVING 3 CHILD NODES

No → **S6614** INTRA-GROUP COMPLETE HOLD PROCESSING FOR NODE HAVING 3 CHILD NODES

NODE

ONLY 1 CHILD (MODE) IS HOLD, AND THE REST IS RESET → **S6616** PROCESSING FOR CASE WHERE ONLY 1 CHILD (MODE) IS HOLD, AND THE REST IS RESET

NODE

NODES

ONLY 2 CHILD (MODES) ARE HOLD, AND THE REST IS RESET → **S6618** PROCESSING FOR CASE WHERE ONLY 2 CHILD (MODES) ARE HOLD, AND THE REST IS RESET

NODES

else → **S6620** INTRA-GROUP COMPLETE HOLD PROCESSING FOR NODE HAVING 3 CHILD NODES

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FIG.54

ENTRY (S6616)

$Zi\_rel\_estm = 0$

$Zj\_rel\_estm = Zj\_rel\_estm\_p + (0 - Zj\_rel\_estm\_p)$
$* \Delta T/(Testm + \Delta T)$

$Zk\_rel\_estm = Zk\_rel\_estm\_p + (0 - Zk\_rel\_estm\_p)$
$* \Delta T/(+ \Delta T)$

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$* \Delta T / (Testm + \Delta T)$

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FIG.62